## HEIGHT AND WEIGHT CALLBACKS

Beginning in 2007, in an effort to increase accuracy in proxy report of height and weight, questions were included in the NC CHAMP survey to assess how the respondent arrived at the answer for the child's height and weight. Response options to these questions included: (1) Child told respondent his/her weight; (2) Respondent estimated or guessed child's weight; (3) Respondent used a bathroom scale/tape measure or vard stick within the past six months; (4) Child was weighed/measured at the doctor's office within the past six months; (5) Child was weighed/measured at school within the past six months; or (6) Some other way. Respondents who did not report the child's height and weight had been measured using a measuring tape or scale were asked if they would participate in a callback survey. Respondents were asked to measure the child using a measuring tape and/or scale in order to report a more accurate measurement of the child's height and weight and could either call the survey center with the updated measurements or have the survey center call the respondent back within the following week. In 2008, 29.9 percent (N = 762) were flagged for callback to update either their child's weight and/or height; 78.3 percent (N = 597) participated in the height/weight callback and provided updated measures of height (N = 315), weight (N = 64) or both height and weight (N = 218).

## Results

Detailed data tables for NC CHAMP survey items are posted on the SCHS Web site on an annual basis (www. schs.state.nc.us/SCHS/champ/results.html). State level estimates are available for survey items tabulated by characteristics of the child, including sex, race, Hispanic origin, age group, school enrollment type (public/ private), grade level, health insurance status, and Special Health Care Needs status, as well as parental education level. County-level estimates are not reported due to small sample sizes. Given the complex sample design of the NC CHAMP Survey (i.e., it is not a simple random sample), SUDAAN software (Research Triangle Institute, 2005) is used to calculate the point estimates and confidence intervals. This software takes into account the complex sampling design when computing the variance, or sampling error, associated with the estimates. The 95 percent confidence interval indicates the range in which the true population value would

occur 95 out of 100 times, if 100 different random samples were taken of the population. Respondents who refused to answer or did not know the answer to a survey question were excluded from calculations in the data tables. The denominator for each calculation is the number of participants who responded to the item.

Consideration should be given to both the sample size and the width of the confidence intervals. One should use caution in interpreting cell sizes less than 50. The cell size refers to either the number of respondents found in the denominator (i.e., the table column labeled 'Total Respond') or the numerator (defined by the number of respondents associated with the response categories, e.g., 'Yes-No'). It is the practice of the CDC to suppress BRFSS results if the unweighted sample size for the denominator is less than 50 or if the half-width of the confidence interval is greater than 10 percent. Although NC CHAMP does not suppress results based on these criteria, the reader should take note when this occurs and should view the corresponding results as unreliable.

## Strengths and limitations

One potential limitation of the NC CHAMP survey is due to the fact that the data are reported by proxy (approximately 94% of surveys are completed by a parent; 6% by another adult, such as a grandparent). Therefore, NC CHAMP data are based on subjective parental perception of the child's health characteristics. Research suggests that parental respondents may not accurately report health risk behaviors involving their children, especially those that are illegal or socially undesirable. Inconsistency in how well parents judge child health, possibly depending on cultural and socioeconomic variables, is a limiting factor in this study. In addition, in certain cases, parents may not be aware of the health risk behaviors of their children—especially teenagers.

Another limitation is one common to all telephone surveys—the pool of respondents is limited to only those who have a telephone, leading to a lack of coverage of people who live in households without a telephone. As a result, even though the telephone numbers are randomly selected and the data are weighted to represent the statewide population of children, there are some limits to how well the data can be generalized to all North Carolina children. Previous